



Revision number:1

Purchasing Agent: JARED GARDNER 801-538-3342

Item: WING PLOWS 12' MID-MOUNT AND FRONT MOUNTED JUNIOR 8' WINGS

Vendor: 00938A H & K TRUCK EQUIPMENT
1103 SOUTH 700 WEST
SALT LAKE CITY, UTAH 84104-1543

Internet Homepage:

Telephone: (801) 886-3000

Fax number: (801) 886-0424

Contact: KEVIN L. HAMRICK

Email address:

Brand/trade name: MONROE

Price: SEE ATTACHED PRICE LIST

Terms: NET

Effective dates: 07/15/01 through 07/15/03

Days required for delivery: 90 DAYS ARO

Price guarantee period: 1 YEAR

Minimum order: ONE

Min shipment without charges: INCLUDED IN PRICING

Other conditions: 1 YEAR RENEWAL OPTION

PLEASE NOTICE PRICE INCREASE APPROVED 07/03/02

This contract resulted from bid # DG1216.

This contract covers only those items listed in the price schedule. It is the responsibility of the agency to ensure that other items purchased are invoiced separately. State agencies will place orders directly with the vendor (creating a PG in Finet) and make payments for the same on a PV referencing the original PG. Agencies will return to the vendor any invoice which reflects incorrect pricing.



1. **12' - 0" WING PLOW - MID MOUNT** **DELIVERED @ \$6,033.00/EACH**
2. **8' - 0" WING PLOW - FRONT MOUNT** **DELIVERED @ \$4,460.00/EACH**

PER FOLLOWING SPECIFICATIONS:

The plow is to be new units of current model. The equipment is to meet the following specifications, but is not limited as to additional features furnished by the manufactures. All incidental items to be provide. Wing will be mounted to work in conjunction with a reversible plow without leaving a windrow of snow between the front plow and wing.

Equipment furnished to any state agency must meet current state and federal safety regulations.

General Specifications:

Warranty Minimum warranty to be 18 months.
Items Covered: Defective Parts and Workmanship.
Duration: 18 Months.

Detailed Specifications:

Item 1: 12'-0" Wing shall be designed to mount behind the passenger side door,
Item 2: 8'-0" Wing shall be designed to mount at front left side.

Moldboard The snow plow moldboard shall be constructed of 3/16" commercial grade A569 or equal (50,000 psi) steel. Moldboard ribs must be 1/2" one piece flame cut, one piece, item 1-7 ribs for 12', item 2- 5 ribs for 8' minimum. The ribs to be continuously welded to the moldboard sheet and to the bottom angle. Bottom angle to be 4" X 4" X 3/4" for item 1, 4" X 4" X 1/2" for item 2, thick structural angle iron minimum. To have reinforcement 1/2" x 3" x 3" gussets welded approximately every 12".

The top edge will be formed channel 2-1/2" X 1". The upper push arm for 12' attaching point will be 1/2" X 4" X 4" angle iron. The lower push arm attaching pin will be 1/2" X 3" x 4" angle iron. The 12' plow shall have a front nose height of 28" minimum and a rear height of 38" minimum. When lowering the moldboard, it shall let the hell down first and then let the doe down last.

Item 1: 12'-0" plow to have a cutting edge length of 144" and a overall moldboard length of approximately 148" minimum. To have full trip moldboard.

**Cutting
Edges**

To have double cutting edges installed. First edge to have tungsten carbide inserts. Second edge to be bolted in front of carbide insert edge. To have standard top punch with AASHO spacing.



- Push Arms** **Item 1:** 12' plow to have dual wing push arms outer tube of the push arm to be 2-1/2" ID by .300 wall thickness with an inner shaft of a minimum of 2-1/4" OD 1045 solid shaft minimum. The push arm to have adjustment in and out to maintain 90 degrees arm to moldboard. Lower push arm to be spring cushioned and have a safety shear pin. The push arms shall have numerous holes for adjustment in and out to help maintain 90 degree arm to mold board. The push arm shall pin to the moldboard and the rear wing mount with cast steel knuckles or equal. Wing push arm 1 to be 51 1/2" and push arm 2 to 60" and 39 1/2" to mounted spring bracket. See attach view A.
- Hydraulic Valve** UDOT to provide one 4 way (double acting) valve, hoses and Controls with truck.
Any additional components needed for a fully operational wing plow to be provide by bidder.
- Cylinder** The cylinders rod shall be a hard chrome or equal. Item 1- 12' wing post cylinder shall be a minimum of 4" ID X 14.81" stroke. The rod diameter shall be a minimum 2" and shall be a double acting cylinder. Items 2- 4" ID X 12" and 3" ID X 10" minimum, dual acting cylinder.
- Weight** **Item 1:** Weight of the complete wing assembly, including cutting edges should be 1750 LBS. approximate. Heavier plows will be considered, based on special features and engineering evidence that additional weight is needed to provide a desirable strength.
Approximate Weight 1750 lbs.
- Mast** **Item 1:** -12' front post shall be fabricated from a structural steel I- beam 66" maximum. (See drawing C & D) This I-beam shall be a minimum of 7" X 15.3# per ft. It shall be fabricated and reinforced in such manner to allow the full travel of the front side plate from the top to the bottom. The front slide must be a minimum of 1/2" thick steel and incorporate a 5" mechanical float. The slide plate must be retained in the I-beam with a minimum of 3/4" square structural steel bars and welded in permanently. Front side toward cab to have 4" X 4" X 1/2" minimum angle iron stiffer to fully support post beam. To have a lifting eye mounted to top of post to aid removing and installing beam.
Item 2: front mast to include all components needed for installation.
- Cross Tube** **Item 1:** The wing post cross tube is to be a minimum of 5" X 7" X 3/8" thick wall tubing. The cross tube is installed with the 7" portion in the vertical position. The cross tube in the stationary post is retained by two(20 3/4" grade 8 hardware). On the end of the cross tube a 1/2" plat shall be welded in place for attaching the post to the cross tube. Both plates shall be welded in place for attaching the post to the cross tube. Both plates shall have extra holes for adjusting the wing post height. The entire slide assembly shall be removable from the post for easy repair.



Identification The unit shall have a metal tag continuous weld at approximately 3 in, from the upper right corner on the back of the blade with the following data: manufacturer's name, year of manufacture, model number and serial number.

The plow shall have the U.D.O.T. 6 digit unit number in 2 inch high numbers below the manufacturer's tag. The unit number is to be applied, by welding directly to metal. Unit numbers will be specified on purchase order when issued.

Paint Powered coat paint preferred or all steel to be sand blasted, metal prepared, and 2 coats of primer applied before painting. To be verified at time of delivery. Plow to be painted to match truck cab and chassis. Color is specified as Sickens 0311 Omaha orange unleaded. No hydraulic hoses or fittings shall be painted. Manufacturer's standard emblems and model designations allowed but not to exceed 4 inches high. All other advertising and decorative striping to be omitted. Moldboard Powder Coat painted orange, mounting hard painted black.

OPTION Full trip cutting edge on moldboard - one piece trip edge in lieu of full moldboard trip on 12' wing. @ **\$797.00**

OPTION Two piece Torsion trip cutting edge on moldboard. In lieu of full moldboard trip on 12' wing. @ **\$789.00**

OPTION The torsion springs shall rotate on 1-1/2" schedule 40 pipe. **STANDARD**

OPTION Wing loc to act as a safety device by locking the wing in the up position in case of hydraulic line breakage and also prevents wing drifting. @ **\$158.00**

OPTION Cushion valve or cylinder to slow blade to final stop up position. **DE-CELL CYLINDER** @ **\$303.00**

OPTION Wrap around curb guard. @ **\$ 75.00**

OPTION Markers for post (to show blade height to ground). Markers for moldboard. @ **\$ 22.00**

OPTION Cast iron moldboard shoe. @ **\$112.00**

QUALITY

The unit will be inspected when delivered. Welds are to be of general good workmanship, and must conform to AS D1.1 and D1.2 standards. All welds must be continuous. Paint and finish details are to be of good workmanship and appearance. Units failing this inspection will not be accepted.



Training

To have a factory technician to provide two days of training on installation.

PARTS AND SERVICE

The servicing and supplying of parts for maintenance should be available in the Salt Lake City area. Consideration of this serviceability will be made before the awarding of a purchase order.

DELIVERY

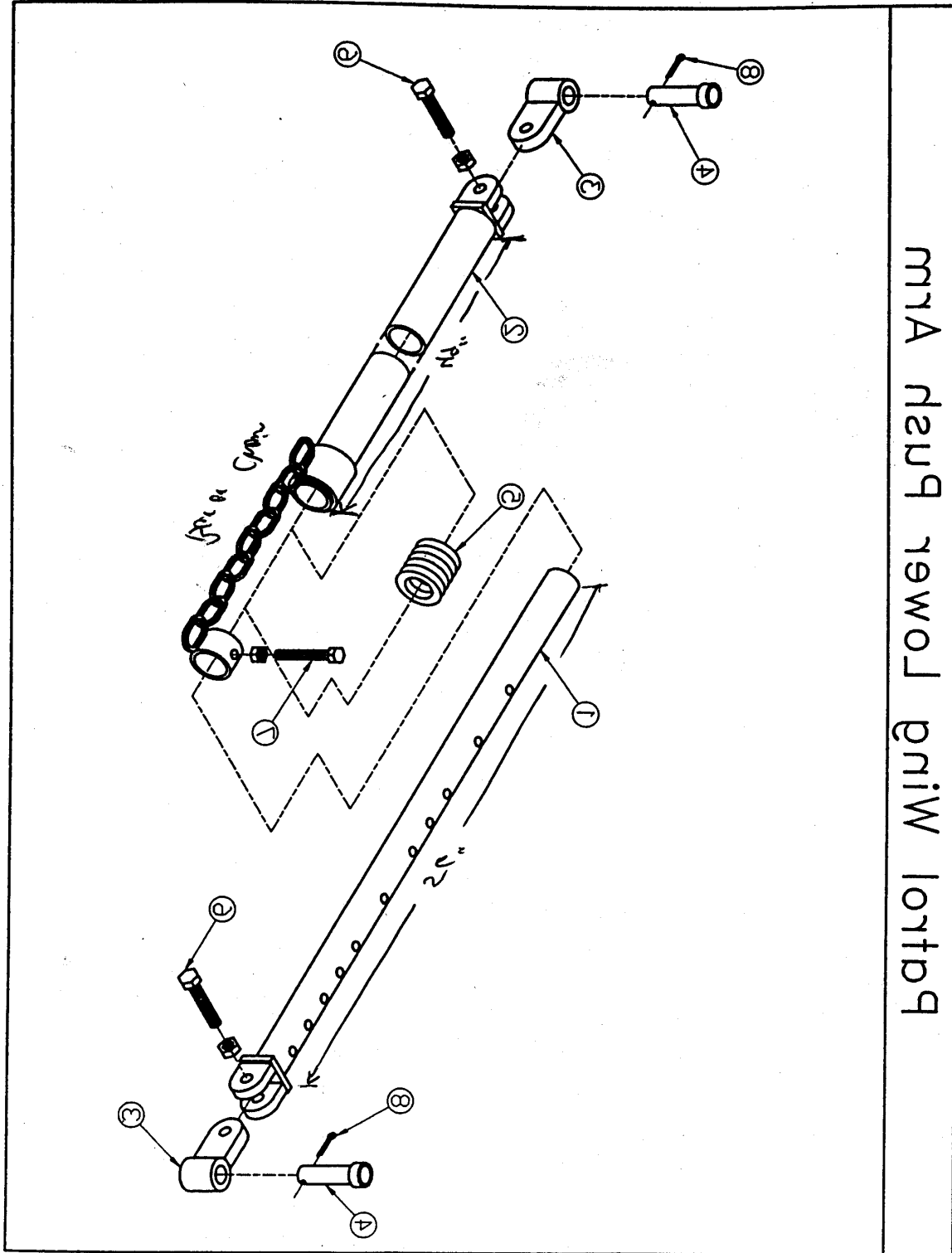
Delivery of the first unit within 40 days as a pilot and the remainder as soon as possible but within 90 days after receipt of order.

Delivery must include the following:

- dealer's invoice
- a copy of warranty
- operator's manual for each unit
- 5 complete sets of manuals including:
parts list, repair manual, operator's manual
for each unit.

Cost of these manuals is to be included in bid price.

Invoices will not be approved for payment until all documentation and manuals have been received.







REPORTS:

THE CONTRACTOR WILL SUBMIT YEARLY REPORTS TO THE STATE PURCHASING AGENT SHOWING QUANTITIES AND DOLLAR VOLUME OF PURCHASES BY EACH AGENCY AND POLITICAL SUBDIVISION. THIS REPORT WILL BE DUE 07/15/2002.

FINET COMMODITY CODE(S):(**FOR AGENCY USE ONLY**)

76561000000 - SNOW PLOWS, VEHICLE MOUNTED